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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,258	03/28/2001,	William C. Vablais	2740	1983

7590 09/30/2004

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EXAMINER

DHARIA, PRABODH M

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,258

Applicant(s)

VABLAIS ET AL

Examiner

Prabodh M Dharja

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-14 and 17-24 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 15, 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03-19-04, 04-27-04, 02-13-03, 02-10-03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. **Status:** Receipt is acknowledged of papers submitted on 09-27-2004 under request for reconsideration have been placed of record in the file. Claims 1-24 are pending in this action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schiller et al. (6,577,299 B1) in view of Herbst et al. (4,128,829) and Black (6,539,101 B1).

Regarding Claim 1, Schiller et al. teaches a device for sensing writing movement (Col. 5, Lines 60,61), comprising, an electronic module (Col. 3, lines 37-43) configured to be received within a writing instrument (Col. 3, line 21,22), comprising: a ballistic generator (kinetic energy converter in to the electrical energy accelerometers) (Col. 3, Lines 38-43) that is configured to generate movement information resulting from writing movements (Col. 3, Lines 55-58); and a transmitter that is configured to transmit the movement information to a remote computer (Col. 7, Lines 29-32).

However, Schiller et al. fails to teach a specifically ballistic generator.

However, Herbst et al. teach a specifically a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument with

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electronic module (Col. 6, Lines 30-47, Col. 10, lines 27-68, Col. 11, Lines 59-65, Col. 19, Lines 31-51).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Herbst et al. teaching in teaching of Schiller et al. to be able to improve signature verification method by utilizing two orthogonally disposed acceleration components together with pressure patterns which are produced during the writing of the signature and utilizing all three of these individual parameters in the correlation operation.

Schiller et al. teaches a device for sensing writing movement, comprising, an electronic module configured to be received within a cavity in the writing instrument that is configured to receive plurality of the cartridges, comprising: a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument (Col. 3, Lines 21-54).

However, Schiller et al. fails to recite specifically writing instrument that is configured to receive plurality of the cartridges.

However, Black recites specifically writing instrument that is configured to receive plurality of the cartridges (Col. 8, Lines 1-39, Col. 26, Lines 5-11).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Black teaching in teaching of Schiller et al. to be able to improve signature verification method by utilizing biometric properties or their combination or with one or more metric sensors, while the user signs his/her name, or even for writing anything.

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Regarding Claim 2, Schiller et al. teaches the ballistic generator comprises an accelerometer (Col. 3, Lines 38-58, Col. 5, Lines 6-10). Herbst et al. teach a specifically a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument with electronic module (Col. 6, Lines 30-47, Col. 10, lines 27-68, Col. 11, Lines 59-65, Col. 19, Lines 31-51).

Regarding Claim 3, Schiller et al. teaches the accelerometer is configured to generate writing instrument tilt information (Col. 5, Lines 6-10, Col. 6, Lines 41-49).

Black teaches the accelerometer is configured to generate writing instrument tilt information (Col. 8, Lines 2-9, as tilt represent angel at which pen touches writing surface).

Regarding Claim 4, Schiller et al. teaches a motion sensor configured to power on the electronic module upon detecting movement of the electronic module (Col. 7, Line 54 to Col. 8, Line 12).

Regarding Claim 5, Schiller et al. teaches the electronic module is configured to fit within a cavity that is configured to receive an ink cartridge for the writing instrument (Col. 3, lines 32-34).

Regarding Claim 8, Schiller et al. teaches an electronic module, comprising, means for attaching the electronic module to a writing instrument; a ballistic generator that is configured to

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generate movement information resulting from writing movements; and a transmitter that is configured to transmit the movement information to a remote computer (Col. 3, Lines 21-54).

However, Schiller et al. fails to teach a specifically ballistic generator.

However, Herbst et al. teach a specifically a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument with electronic module (Col. 6, Lines 30-47, Col. 10, lines 27-68, Col. 11, Lines 59-65, Col. 19, Lines 31-51).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Herbst et al. teaching in teaching of Schiller et al. to be able to improve signature verification method by utilizing two orthogonally disposed acceleration components together with pressure patterns which are produced during the writing of the signature and utilizing all three of these individual parameters in the correlation operation.

Schiller et al. teaches a device for sensing writing movement, comprising, an electronic module configured to be received within a cavity in the writing instrument that is configured to receive plurality of the cartridges, comprising: a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument (Col. 3, Lines 21-54).

However, Schiller et al. fails to recite specifically writing instrument that is configured to receive plurality of the cartridges.

However, Black recites specifically writing instrument that is configured to receive plurality of the cartridges (Col. 8, Lines 1-39, Col. 26, Lines 5-11).

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Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Black teaching in teaching of Schiller et al. to be able to improve signature verification method by utilizing biometric properties or their combination or with one or more metric sensors, while the user signs his/her name, or even for writing anything.

Regarding Claim 9, Schiller et al. teaches ballistic generator comprises an accelerometer (kinetic energy converter in to the electrical energy accelerometers) (Col. 3, Lines 38-58, Col. 5, Lines 6-10). Herbst et al. teach a specifically a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument with electronic module (Col. 6, Lines 30-47, Col. 10, lines 27-68, Col. 11, Lines 59-65, Col. 19, Lines 31-51).

Regarding Claim 10, Schiller et al. teaches the accelerometer is configured to generate writing instrument tilt information (Col. 5, Lines 6-10, Col. 6, Lines 41-49).

Black teaches the accelerometer is configured to generate writing instrument tilt information (Col. 8, Lines 2-9, as tilt represent angel at which pen touches writing surface).

Regarding Claim 11, Schiller et al. teaches a motion sensor configured to power on the electronic module upon detecting movement of the electronic module (Col. 7, Line 54 to Col. 8, Line 12).

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Regarding Claim 12, Schiller et al. teaches a device for sensing writing movement, comprising, an electronic module configured to be received within a cavity in the writing instrument that is configured to receive plurality of the cartridges, comprising: a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument (Col. 3, Lines 21-54).

However, Schiller et al. fails to teach a specifically ballistic generator.

However, Herbst et al. teach a specifically a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument with electronic module (Col. 6, Lines 30-47, Col. 10, lines 27-68, Col. 11, Lines 59-65, Col. 19, Lines 31-51).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Herbst et al. teaching in teaching of Schiller et al. to be able to improve signature verification method by utilizing two orthogonally disposed acceleration components together with pressure patterns which are produced during the writing of the signature and utilizing all three of these individual parameters in the correlation operation.

Schiller et al. teaches a device for sensing writing movement, comprising, an electronic module configured to be received within a cavity in the writing instrument that is configured to receive plurality of the cartridges, comprising: a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument (Col. 3, Lines 21-54).

However, Schiller et al. fails to recite specifically writing instrument that is configured to receive plurality of the cartridges.

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However, Black recites specifically writing instrument that is configured to receive plurality of the cartridges (Col. 8, Lines 1-39, Col. 26, Lines 5-11).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Black teaching in teaching of Schiller et al. to be able to improve signature verification method by utilizing biometric properties or their combination or with one or more metric sensors, while the user signs his/her name, or even for writing anything.

Regarding Claim 13, Schiller et al. teaches a transmitter that is configured to transmit the movement information to a remote computer (Col. 4, Lines 40-51).

Regarding Claim 14, Schiller et al. teaches a device for sensing writing movement, comprising, an electronic module configured to be received within a cavity in the writing instrument that is configured to receive plurality of the cartridges, comprising: a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument (Col. 3, Lines 21-54).

However, Schiller et al. fails to teach a specifically ballistic generator.

However, Herbst et al. teach a specifically a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument with electronic module (Col. 6, Lines 30-47, Col. 10, lines 27-68, Col. 11, Lines 59-65, Col. 19, Lines 31-51).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Herbst et al. teaching in teaching of Schiller et al. to be able to improve signature

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verification method by utilizing two orthogonally disposed acceleration components together with pressure patterns which are produced during the writing of the signature and utilizing all three of these individual parameters in the correlation operation.

Schiller et al. teaches a device for sensing writing movement, comprising, an electronic module configured to be received within a cavity in the writing instrument that is configured to receive plurality of the cartridges, comprising: a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument (Col. 3, Lines 21-54).

However, Schiller et al. fails to recite specifically writing instrument that is configured to receive plurality of the cartridges.

However, Black recites specifically writing instrument that is configured to receive plurality of the cartridges (Col. 8, Lines 1-39, Col. 26, Lines 5-11).

Thus it is obvious to one in the ordinary skill in the art at the time of invention was made to incorporate Black teaching in teaching of Schiller et al. to be able to improve signature verification method by utilizing biometric properties or their combination or with one or more metric sensors, while the user signs his/her name, or even for writing anything.

Regarding Claim 17, Schiller et al. teaches the ballistic generator comprises an accelerometer (kinetic energy converter in to the electrical energy accelerometers) (Col. 3, Lines 38-58, Col. 5, Lines 6-10). Herbst et al. teach a specifically a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument with electronic module (Col. 6, Lines 30-47, Col. 10, lines 27-68, Col. 11, Lines 59-65, Col. 19,

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Lines 31-51) and filtering the electronic movement information to form filtered data; and providing the filtered data to a client application (Col. 6, Lines 50-53).

Regarding Claim 18, Schiller et al. teaches the accelerometer is configured to generate writing instrument tilt information (Col. 5, Lines 6-10, Col. 6, Lines 41-49).

Black teaches the accelerometer is configured to generate writing instrument tilt information (Col. 8, Lines 2-9, as tilt represent angel at which pen touches writing surface).

Regarding Claim 19, Schiller et al. teaches the electronic module further comprises a motion sensor configured to power on the electronic module upon detecting movement of the writing instrument (Col. 7, Line 54 to Col. 8, Line 12).

Regarding Claim 20, Schiller et al. teaches a method of providing electronic movement information to a client application (Col. 4, lines 41-51) comprising: generating through an electronic module added to a writing instrument (Col. 3, Lines 31-46), movement information as a result of movement of the writing instrument (Col. 3, Lines 55-58, Col. 6, Lines 24-28); providing the electronic movement information to a computer that is remote of the writing instrument (Col. 4, lines 41-51); filtering the electronic movement information to form filtered data; and providing the filtered data to a client application (Col. 4, Line 41 to Col. 5, Line 11).

Herbst et al. teach a specifically a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument with electronic module (Col. 6, Lines 30-47, Col. 10, lines 27-68, Col. 11, Lines 59-65, Col. 19, Lines 31-51) and

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filtering the electronic movement information to form filtered data; and providing the filtered data to a client application (Col. 6, Lines 50-53).

Regarding Claim 21, Schiller et al. teaches providing calibration information to the computer prior to generating the movement information; and altering the filtered data in accordance with the calibration information (Col. 4, Line 41 to Col. 5, Line 11).

Herbst et al. teach a specifically a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument with electronic module (Col. 6, Lines 30-47, Col. 10, lines 27-68, Col. 11, Lines 59-65, Col. 19, Lines 31-51) and filtering the electronic movement information to form filtered data; and providing the filtered data to a client application (Col. 6, Lines 50-53).

Regarding Claim 22, Black teaches the writing instrument comprises fountain pen (Col. 15, Lines 32,33).

Regarding Claim 23, Black teaches the writing instrument comprises fountain pen (Col. 15, Lines 32,33).

Regarding Claim 24, Black teaches the writing instrument comprises fountain pen (Col. 15, Lines 32,33).

Allowable Subject Matter

4. Claims 6,7,15,16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: a device for sensing writing movement, comprising, an electronic module configured to be received within a cavity in the writing instrument that is configured to receive plurality of the cartridges, comprising: a ballistic generator configured to generate movement information resulting from writing movements of the writing instrument and a first of the two cartridges is aligned to provide ink for a tip of the fountain pen, and a second is positioned so that it abuts the first, and wherein the electronic module is positioned in the location of the second cartridge and a transmitter that is configured to transmit the movement information to a remote computer.

The cited references on 892's fail to recite, anticipate individually and render obviousness individually or in combination above bold underlined.

Response to Arguments

6. Applicant's arguments with respect to claim 06-24-2004 have been considered but are moot in view of the new ground(s) of rejection.

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is informed that all of the other additional cited references either anticipate or render the claims obvious. In order to not to be repetitive and exhaustive, the examiner did draft additional rejection based on those references.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Goodwin et al. (6,029,816) Packaging.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M Dharia whose telephone number is 703-605-1231. The examiner can normally be reached on M-F 8AM to 5PM.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-3054938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

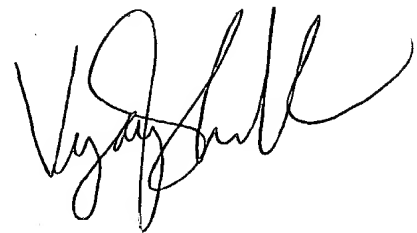
Commissioner of Patents and Trademarks

Washington, D.C. 20231

PD

AU2673

September 27, 2004

A handwritten signature in black ink, appearing to read 'Vijay Shankar', is written over a rectangular area.

**VIJAY SHANKAR
PRIMARY EXAMINER**